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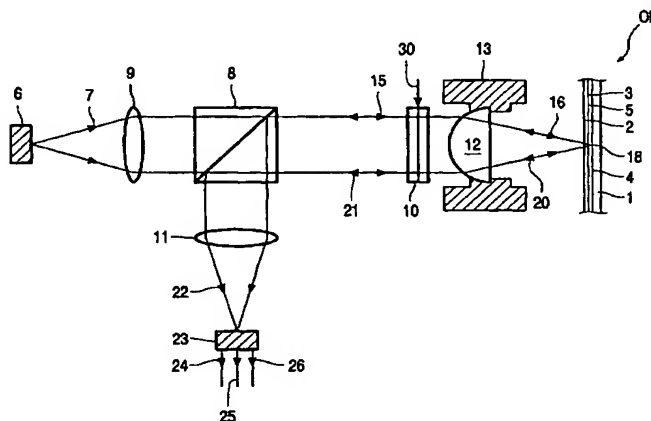
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**Declaration under Rule 4.17:**

— as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA,

[Continued on next page]

(54) Title: OPTICAL SCANNING DEVICE



(57) Abstract: An optical scanning device for scanning a multi-layer optical record carrier when positioned in a scanning location in the device, the device being adapted for scanning a first information layer at a first information layer depth within the record carrier and a second information layer at a second information layer depth within the record carrier. The device comprises: a radiation source for generating a radiation beam; an objective lens, located in an optical path between the radiation source and the scanning location, for converging a radiation beam to a spot on an information layer; and - an optical switching arrangement switchable between a first state, in which the device is arranged to scan a said first information layer, and a second state, in which the device is arranged to scan a said second information layer. The optical switching arrangement comprises a compensator arranged to generate a different amount of spherical aberration in a radiation beam when in said first state and when in said second state. The compensator is further arranged to generate a different amount of vergence in a radiation beam when in said first state and when in said second state. The different amounts of spherical aberration and vergence are selected such that a free working distance between said objective lens and said optical record carrier remains substantially constant when switching between said first and second states.



MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)

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A. CLASSIFICATION OF SUBJECT MATTER  
IPC 7 G11B7/135 G11B7/09 G11B7/125

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## B. FIELDS SEARCHED

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)  
EPO-Internal, PAJ

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

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X	PATENT ABSTRACTS OF JAPAN vol. 2002, no. 03, 3 April 2002 (2002-04-03) -& JP 2001 307370 A (OLYMPUS OPTICAL CO LTD), 2 November 2001 (2001-11-02)	1-4,9-11
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X	WO 00/34949 A (KONINKL PHILIPS ELECTRONICS NV) 15 June 2000 (2000-06-15)	1-4,9-11
A	abstract page 4, line 10 - page 9, line 16 figures 1,3	5-8
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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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